DOCUMENT RESUME

ED 235 882 PS 013 840

AUTHOR Eron, Leonard D.
TITLE The Consistency of Aggressive Behavior across Time and Situations.
PUB DATE Aug 83
NOTE 34p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Adolescents; *Adults; *Aggression; *Children; *Crime; Grade 3; Longitudinal Studies; Parents; *Psychopathology
IDENTIFIERS Cross Generational Studies

ABSTRACT

Results of a longitudinal study conducted over a 21-year period indicated that aggressive behavior remains stable across time, situations, and generations within families. Data were first collected by a survey of all third-grade schoolchildren in a semirural county in New York State. The sample included approximately 870 children (with a modal age of 8 years). Approximately three-quarters of the children's mothers and fathers were interviewed. At the 10-year followup, 427 of the original subjects were reinterviewed. One of the most impressive findings was the stability of aggressive behavior over time and across situations. The third phase of data collection, begun when subjects' modal age was 30, involved approximately 409 members of the original sample. Data concerning these subjects and 223 other subjects were obtained from the New York State Division of Criminal Justice Services, the Division of Motor Vehicles, and the Departments of Mental Hygiene and Health. Interviews were also held with the spouses of 165 subjects and with 82 of the subjects' children. Correlational analysis revealed a relationship between aggression at age 8 and later encounters with the law as indicated by driving and criminal offenses. Children nominated as more aggressive by their third-grade classmates committed, on the average, more serious crimes as adults than did peers rated less aggressive. Finally, it was suggested that aggression appears to be a characteristic that is transmitted across generations. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED235882

The Consistency of Aggressive Behavior Across Time and Situations[1]

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Leonard D. Eron

University of Illinois at Chicago

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Leonard D. Eron

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 013840

1. Presented at symposium on "Consistency of Aggression and its Correlates over Twenty Years", at meetings of American Psychological Association, Anaheim, California 8/27/83.

The Consistency of Aggressive Behavior Across Time and Situations

It has by now become trite to state that aggression is an overdetermined behavior. Obviously, there are genetic, constitutional, and environmental factors, as well as an individual's learning history and specific situational events, all of which go into determining whether a given person will act in an aggressive manner at any specific time. However, this does not mean that aggressive behavior cannot be predicted or explained. Research that we all, in this symposium, have been doing over the past 30 years would indicate that aggressive behavior is consistent over time and across situations despite the fact that a number of factors contribute to the behavior in varying degrees. Further, we have begun to get an understanding of what these other factors are and how they contribute to the enhancement or inhibition of aggressive behavior. All of the participants in this symposium will have something to say about the stability and predictability of personality, particularly aggression or its correlates. I will talk first about the stability of aggressive behavior and how early manifestations of aggression are predictive of adult aggression and anti-social behavior. Then Dr. Huesmann will discuss the stability of intellectual competence and how it is related to the development of aggression. Dr. Lefkowitz will follow with a discussion of the predictability of psychopathological behavior and how manifestations of aggression and psychopathology are related in the individual's development. Finally, Dr. Walder will introduce a positive note by discussing the relation between prosocial behavior and aggression in development and how adult prosocial behavior can be predicted from indications apparent 10 and 20 years earlier. Dr. Block then will discuss all the papers from the perspective of one who has been engaged in the longitudinal study of personality development and its predictability over many years.

In 1960, we copmleted a survey of all the third-grade school children in a semi-rural county in New York State. This included approximately 870 youngsters whose modal age at the time was eight years. We also interviewed 75-80% of their mothers and fathers. The focus of our procedures was the aggressive behavior of the subjects as manifested in school. Our purpose was to delineate the learning conditions for aggression, and therefore, we collected information about the presumed psychological and social antecedents and correlates of aggressive behavior. Most of the findings of this phase of the study have been published, and they indicate that many children learn to be more or less aggressive from interactions with the environment (Eron, Walder and Lefkowitz, 1972).

One of the pitfalls of longitudinal research conducted over many years is that when the research is begun, it is difficult to predict what the crucial variables will be over the course of the study. When we started our research in the development of aggression over 25 years ago, we proceded from our understanding of learning theory and role theory (Eron, Laulicht, Walder, Farber and Spiegel, 1961) to select the variables we thought at that time were important and then devised measures of these variables. Thus, we turned our attention to such variables as instigation to aggressive behavior and the reinforcements that followed once the aggression was elicited. We were also interested in the models of behavior furnished by significant others. Since intelligence is such an ubiquitous variable, related to almost everything that psychologists investigate, we at least included a measure of IQ in our early battery. We also hypothesized at that time that aggression was a facet of psychopathology. However, after trying for 4 years to develop a measure of child psychopathology with very little success, we gave up and thus have no such early measure. Perhaps we

should have tried harder or waited 15 years until Tom Achenbach developed his excellent scale for child psychopathology ( ). At any rate, we had no measure of psychopathology or behavior disturbance at age 8, other than aggression.

Another set of variables we didn't even try to measure because they had no place in our theorizing at that time were the prosocial behaviors - those behaviors which could replace aggressive behavior as a general problem-solving strategy in a child's repertoire of responses. Thus, when the subjects were eight-years-old, we obtained no direct measure either of prosocial behavior or psychopathology. However, we had two indirect indicators of prosocial behavior. These were the subjects' popularity with their peers and their aggression anxiety, (Eron, Walder and Lefkowitz, 1971). In a factor analysis, these two measures loaded heavily on the same factor. Both of these measures indicate concern about interpersonal relations and a reluctance to harm others. For example, the aggression anxiety scale included peer nominations for the question, "who says, 'excuse me even if they have not done anying bad'" while the popularity scale included nominations on "who would you like to sit next to in class?"

During the second wave of data collection when the subjects' modal age was 19, we recognized our previous mistakes of omission and included the MMPI for an indication of psychopathology and ratings of leadership which was seen as an outcome of prosocial behavior. We also included peer ratings of aggression anxiety and popularity along with the peer-rating measure of aggression.

Thus, at the ten year follow-up, we reinterviewed 427 of the original subjects. One of the most impressive findings was the stability of aggressive behavior over time and across situations using a variety of measurement operations (Lefkowitz, Eron, Walder and Huesmann, 1977). The relation of aggression to psychopathology became manifest as well as the role of prosocial behaviors in

inhibiting the development and expression of aggressive behavior. Further, it was apparent that the youngster's intellectual ability was negatively related to aggressive behavior both contemporaneously and across time, and that intellectual competence itself showed a remakrable constancy across time and measures.

In 1981, we again interviewed approximately 295 of the original subjects individually and another 114 by mail (modal age, 30). In addition, we obtained data about these subjects and 223 other subjects from the New York State Division of Criminal Justice Services, the Division of Motor Vehicles and the Departments of Mental Hygiene and Health. These data included criminal offenses, traffic violations, state hospital admissions and particulars about perinatal events. We also were successful in obtaining interviews with the spouses of 165 subjects, and 82 of the subjects' own children who at the time were approximately the same age as the subjects when first seen. Thus, there are data from three generations of informants - the subjects and their spouses, the subjects' parents and the subjects' children.

In this paper, I will talk primarily about aggressive behavior - my copanelists will discuss results with the other variables we studied. However, before going into the results with aggressive behavior, I would like to mention and briefly describe some of the measures to which we will all be referring.

Early Measures

Child aggression in 1960 was measured by a peer-nomination technique (Walder, Abelson, Eron, Banta & Laulicht, 1961). In this procedure, every child in a class rates every other child on a series of 10 specific items of aggressive behavior. The child's aggression score is the percentage of times he was nominated by his peers on the 10 items out of the total number of times he could have been nominated. The same is true for the two aggression anxiety items and the

popularity item. The reliability and validity of this measure have been extensively documented (Eron, et al., 1972, Lefkowitz, et al., 1977; Eron, Huesmann, Brice, Fischer and Mermelstein, 1983). Intelligence in 1960, i.e., in the first wave, was measured by the California Mental Maturity Scale, Short Form (Sullivan, Clark and Tiegs, 1957).

Later Measures

Indications of the subjects' aggression 22 years later at age 30 were derived from self-ratings, ratings of the subject by the spouse and citations of offenses by the New York State Divisions of Criminal Justice and Traffic. Self-ratings included the sum of MMPI scales, 4, 9 and F which previous research (Huesmann, Lefkowitz and Eron, 1978) has indicated is a reliable and valid measure of overt aggression. Ratings by the spouse of the subject's aggression included behavior directed toward him or her by the subject. The items came from the Strauss Home Violence Questionnaire (1979). The Criminal Justice scores were the total number of convictions in New York State in the previous 10 years and a rating of the seriousness of the corresponding offenses. The latter is a system used by the New York State Criminal Justice Division in which each type of offense is assigned a specific seriousness score (Rossi, Bose and Berk, 1974). For those subjects who had children, there were also ratings of how severely the subject punished the child as well as self-ratings by the child of overt aggression and fantasy aggression. We will also be referring to another punishment score reflecting how severely the subjects themselves were punished by their own parents. This of course is not a later measure but was obtained concurrently with the peer nomination measure in the first wave of the study.

Indications of intellectual and social competence at age 30 included achieved educational and occupational status of subject, level of ego development (as measured by the Loevinger Sentence Completion Test (Loevinger and

Wessler, 1979), Wide Range Achievement Test (WRAT) Spelling, Reading and Arithmetic (Jastak & Jastak, 1978) scores and social incompentency, as measured by the Ullmann Giovannoni Scale, 1964. This scale, ordinarily used to tap premorbid adjustment of schizophrenics, measures a broad range of competency behaviors including adolescent socialization and occupational stability. For indications of the extent of psychopathology, we used the sum of the four psychotic scales on the MMPI, the psychotic tetrad so called, as well as the Beck and CES Depression scales.

Procedure

Subjects were contacted by mail and telephone. Addresses were obtained from local directories, a network of informants, newspaper stories and newspaper advertisements. Subjects were paid $40.00 for an interview lasting one to two hours. The interview was administered in our field office on a microcomputer. The questions were displayed on a TV type monitor and answered by the respondent typing into the computer keyboard. With this procedure, the subjects' responses were immediately punched into the computer and stored on floppy disks which were then read by more powerful computers. This was an efficient, time saving, relatively error-free procedure. Respondents learned the procedure quickly, enjoyed the novelty and were reassured of the confidentiality of their responses. It is very likely that using the computerized interview added to the validity of the information obtained.

At the close of the interview, the subject was asked for permission to contact the spouse for an interview, and if the subject had a child age 6 to 12, permission was sought to interview that child, or the oldest such child, if there were more than one. Spouses were also paid $40.00 per interview and children were paid $20.00. Those subjects who were unable to come to the field office for interviews were asked to fill out a mail questionnaire and were paid $40.00 if it was sent back within two weeks. Certain of the measures which required personal interaction, the WRAT for example, were eliminated for the postal sample. However, for those measures which could be

obtained through the mail, the results were merged with those obtained in the regular procedure. This accounts for the differences in the number of subjects per procedure. Spouses and children were not interviewed by mail.

Results

The effect of attrition over 22 years on the composition of the sample was evaluated by examining the mean 1960 peer-nominated aggression scores for those subjects who were interviewed either personally or by mail with those who were not interviewed at all in 1981. It is apparent from Table 1 that male subjects who were not interviewed in 1981 had a significantly higher mean aggression score in 1960 than those male subjects who were interviewed. However, there was no difference between the personal and postal interview groups. As for the female subjects, there were no significant differences in 1960 aggression score among any of the groups. Male subjects of course had significantly higher aggression scores than females in each group.

Table 1 about here

The correlations between peer-nominated aggression at age 8 and the various aggression measures at age 30 appear in Table 2. For males, it appears that those subjects who were seen as more aggressive by their peers at age 8 rated themselves as more aggressive at age 30, were rated by their wives as more aggressive, had more convictions by the Criminal Justice System, committed more serious crimes, had more moving traffic violations and more convictions for driving while intoxicated. For females, the significant correlations were with self ratings on the MMPI and self ratings of the severity with which they punished their own children. More marginal for females were the relations to the number of criminal convictions and the seriousness of the crimes they

committed.

Table 2 about here

Especially impressive is the correlation between aggression at age 8 and later encounters with the law as indicated by driving and criminal offenses. Since a disproportionate number of the original subjects who moved out of the state subsequent to the original testing were from high aggressive groups (Lefkowitz, et al., 1977), the range of aggression scores has been truncated and the correlations are probably a minimal estimate of the relation between aggression at age 8 and later anti-social behavior of the type that brings individuals into contact with the law. Further, as we saw in Table 1, the mean 1960 aggression score of males not interviewed was significantly higher than the mean aggression score of those males who were interviewed.

Another reason why the Pearson r may be an under estimation of the true relation between variables presented here is that the distributions of many of the measures are skewed (e.g., peer nominated aggression has a pile up of scores at the low end of the scale). A more representative demonstration of the relations can be obtained by dividing the subjects into low, medium and high groups according to the original peer-nomination measure and calculating mean scores on each of the criterion variables separately for each of the three groups. These relations are seen much more graphically in the next 5 figures.

Figures 1-5 about here

Perhaps the most impressive aspects of both the longitudinal correlations and the bar graphs is the relation between peer-nominated aggressive behavior at

age 8 and adult criminality. The children who are nominated as more aggressive by their 3rd-grade classmates on the average commit more serious crimes as adults. In Table 3, the exact conviction rate is shown for each group of males and females. These data convincingly indicate that the peer-nominations we obtained when these subjects were 8-years-old are measuring more than transient "boisterousness and incivility" (Cook, Kendzcerski and Thomas, in press). These peer-nominations measure a characteristic aggressiveness in many children that evidences itself in severe antisocial behavior as a young adult.

Table 3 about here

In Table 4, the skew-corrected correlations are shown for the rating scale measures over all three waves of measurement. If one compares the correlations from age 8 to 19 on those waves' common measures (peer-nominations) with the correlations from age 19 to age 30 on those waves' common measures (MMPI F+4+9 and Self-rated Physical Aggression), one must conclude that stability seems to increase with age. In addition, aggression seems to be more stable for males than for females. This is confirmed by LISREL analysis which time doesn't permit

---

Table 4 about here

---

me to present here. Suffice to say that the stability coefficients determined by this type of analysis are .50 for males and .34 for females over 22 years, and for both genders stability increases with age.

So far, we have only discussed the stability of aggressive behavior within an individual's own lifespan. However, as indicated previously, data were collected in this study not only on the aggressiveness of the subject, but also

on the aggressiveness of the subjects' parents and the subjects' children. Since the sample of subjects for whom all such data are available is only 82 children, the data cannot be analyzed separately by subject's gender. In Table 5 the skew-corrected correlations between the major measures of parent,

---

Table 5 about here

---

subject and child aggression are shown. It is clear from these data that aggressive parents have more aggressive children. Aggression appears to be not only a stable characteristic within individuals but one that is transmitted across generations. One might wonder whether such cross-generational consistency could be explained by consistencies across generations in social class and intelligence. However, the correlations in Table 5 do not change substantially when the parent's social class and the child's IQ at age 8 are partialled out. The consistency across generations is probably enhanced by the fact that our aggressive subjects tended to select aggressive spouses. The correlations between the subjects' aggression as an adult and spouses' aggression range between .20 and .30 depending on the measure of adult aggression used.

Discussion

Our estimates of the stability of aggression over 22 years, about .50 for boys and .34 for girls, are consistent with previous findings for shorter periods when one corrects for differing measurement techniques, e.g., the 16 studies reviewed by Olweus (1979). Moreover, we have shown that the early aggressiveness displayed in school has a reasonable chance of turning into severe antisocial aggressiveness in a young adult. Such aggressiveness may manifest itself in criminal behavior, physical aggression, and child abuse in both genders, and in spouse abuse and driving behaviors for males. We also demonstrated that aggressiveness is transmitted across generation within families.

If aggression were mostly situationally determined, one would certainly not expect stability coefficients of the magnitude we have reported. At the same time, the stability described in this article is a stability of individual differences, i.e., of relative position in a population, not a stability of absolute level. Characteristic forms and amounts of aggression change dramatically with age (Eron, Huesmann, Brice, Fischer & Mermelstein, 1983) and situation. Some situations are much more likely to elicit aggressive behaviors than others. What remains reasonably constant is the aggressiveness of an individual relative to the population. The child who is at the top of the distribution for 8-year-olds is likely to be near the top of the distribution for 30-year-olds two decades later.

It is apparent that many individuals are characterized by a propensity to respond in an aggressive manner to a variety of interpersonal situations. This propensity or disposition becomes apparent early on in their development and continues to characterize their behavior as they grow into adulthood. The development of aggressive behavior, at least in this sample of subjects, is testimony more to constancy than change in human development (Brim and Kagan, 1980). Where lie the roots of this consistency? How does the aggressive disposition take hold and persist across varied environmental conditions?

While this paper was not directed at elaborating the causes of aggression, one cannot discuss the stability of aggression without some attention to this issue. The data reported here, showing predictability of aggression across three generations as well as from childhood to adulthood within a single life span, cannot discriminate between genetic, constitutional and/or environmental explanations. Unfortunately, this particular research program was not originally designed to investigate genetic and constitutional precursors (Eron, Laulicht, Walder, Farber and Spiegel, 1961) and reports of our previous findings (e.g., Eron, et al., 1972; Lefkowitz, et al., 1977) have stressed the importance of the

learning conditions for aggression in a child's development. Our current results are not inconsistent with such a view. Aggressive dispositions can be learned. Youngsters are often directly reinforced for acting aggressively by increased attention as well as by the material and psychological rewards which are often the consequents of such behavior. Examples of aggressive behavior are abundantly available in the media as well as at home, at school and in the neighborhood. The learning of aggressive attitudes is facilitated when respected and glorified figures, e.g., professional athletes, movie stars and political figures, engage in various kinds of aggressive behavior for which they reap many rewards. It is easy for a youngster to justify aggressive solutions to problems by referring to norms for such behavior promulgated by the media and others. Aggression is usually learned early in life (Eron, et al., 1983) and may be learned very well, generalizing to many situations. Aggressive individuals actively seek out and create situations in which they can often be observed (Bowers, 1973; Olweus, 1978), and due to their past conditioning histories, they may be exquisitely sensitive to aggressive cues in the environment (Berkowitz, 1978). Thus, though the individual's environment and learning conditions may change radically, aggression can persist.

Quite probably the impressive stability of aggressive behavior across time and generations is a product both of the continuity of consitutional factors and the continuity of environmental factors. Certainly constitutional characteristics, including genetic factors (Lagerspetz & Lagerspetz, 1974; Christiansen, 1977), hormonal factors (Kreuz & Rose, 1972; Rada, Kellner & Winslow, 1976) and neurological trauma (Mark & Ervin, 1970) play some role in aggressive behavior. Just as certainly a person's environment and learning history strongly influence his/her aggressive tendencies (Bandura, 1973; Berkowitz, 1962; Eron et al., 1971). The relative importance of these factors is arguable. What is not arguable is that aggressive behavior, however engendered, once

established, remains remarkably stable across time, situation and even generations within a family.

Table 1

Mean 1960 Peer - Nominated Aggression Scores of

Subjects in 1981 sample by Gender and Interview Status

1980 Interview	Males		Females	
	M	N	M	N
No Interview	17.5	160	8.9	63
Personal Interview	12.9	136	8.3	159
Postal Interview	12.1	62	9.2	52
	14.8	358	8.6	274

$F_{2,355} = 4.54$ n.s.

$p < .05$

Table 2

Correlations of Peer-nominated Aggression at Age 8

With Aggression at Age 30

	Males		Females	
		Age 8 Aggression		Age 8 Aggression
Age 30 Measures	N	r	N	r
Aggression				
MMPI Scales F+4+9	190	.30***	209	.16* (.20**)
Spouse Abuse	88	.27**	74	---
Punishment of Child by Subject	63	.24*	96	.24**
Criminal Justice Convictions	335	.24***	207	--- (.11)
Seriousness of Criminal Act	332	.21***	207	--- (.17**)
Moving Traffic Violations	322	.21***	201	---
Driving While Intoxicated	322	.29***	201	---
Self-rating of Physical Aggression	193	.25*** (.29***)	209	---

The correlations shown in parentheses are those that changed .04 or more when skew-correcting transformations were applied.

*p < .05 **p < .01 ***p < .001

Table 3

The Proportion of Subjects Convicted for A Crime in New York State Before Age 30 According to Gender and Peer-Nominated Aggression at Age 8

Gender	Age 8 Peer-nominated Aggression		
	Low	Medium	High
Males	8 / 89 = 9.0%	24 / 161 = 15%	19 / 82 = 23%
Females	0 / 49 = 0.0%	2 / 110 = 1.8%	3 / 48 = 6.3%

Table 4

Intercorrelations of Skew-corrected Scores on Rating Scale Measures of Aggression

	MALES							FEMALES						
	AGE 8	AGE 19			AGE 30			AGE 8	AGE 19			AGE 30		
	PEER AGG	PEER AGG	MMPI F+4+9	PHYS AGG	MMPI F+4+9	PHYS AGG	SPOUS AGG	PEER AGG	PEER AGG	MMPI F+4+9	PHYS AGG	MMPI F+4+9	PHYS AGG	SPOUS AGG
AGE 19 AGGRESSION														
PEER-AGG	.44***							.36***						
MMPI-F+4+9	.28***	.40***						.13+	.34***					
PHYSICAL-AGG	.13+	.42***	.28***					.19**	.13+	.16*				
AGE 30 AGGRESSION														
MMPI-F+4+9	.32***	.35***	.55***	.19*				.20**	.22**	.45***	.11			
PHYSICAL-AGG	.29***	.41***	.22**	.28***	.33***			---	.14+	.28***	.18*	.45***		
SPOUS-AGG	.25*	.25*	---	.16	.20+	.46***		---	---	.30*	---	.34**	.34**	
PUN-CHILD	.26*	.40*	.24	---	.22	.18	---	.27**	---	---	.37**	.13	.24*	---

A logit transformation was used with the peer-nominations which are proportions and a log transformation on the self-ratings.

+p<.10 *p<.05 **p<.01 ***p<.001

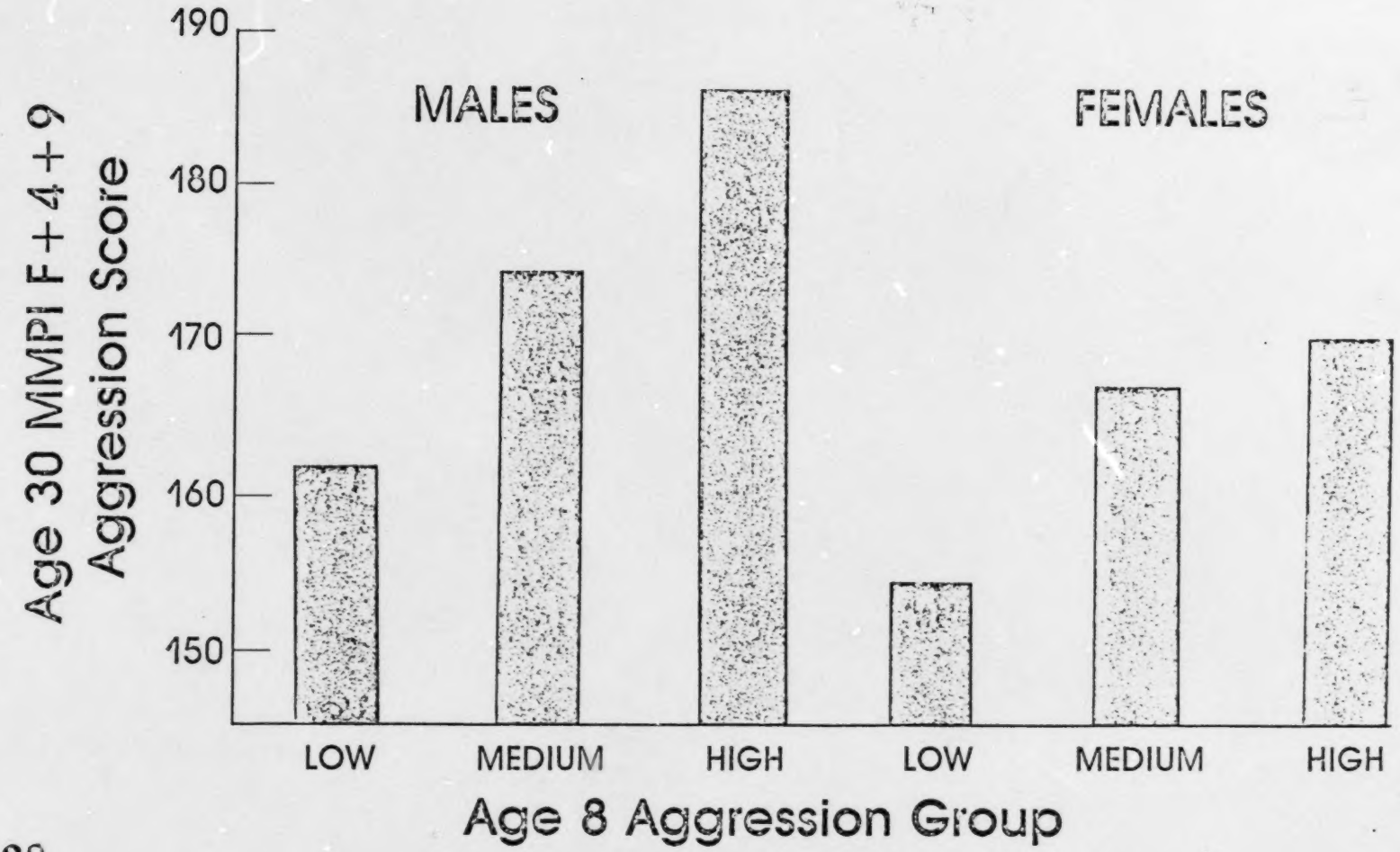
Table 5

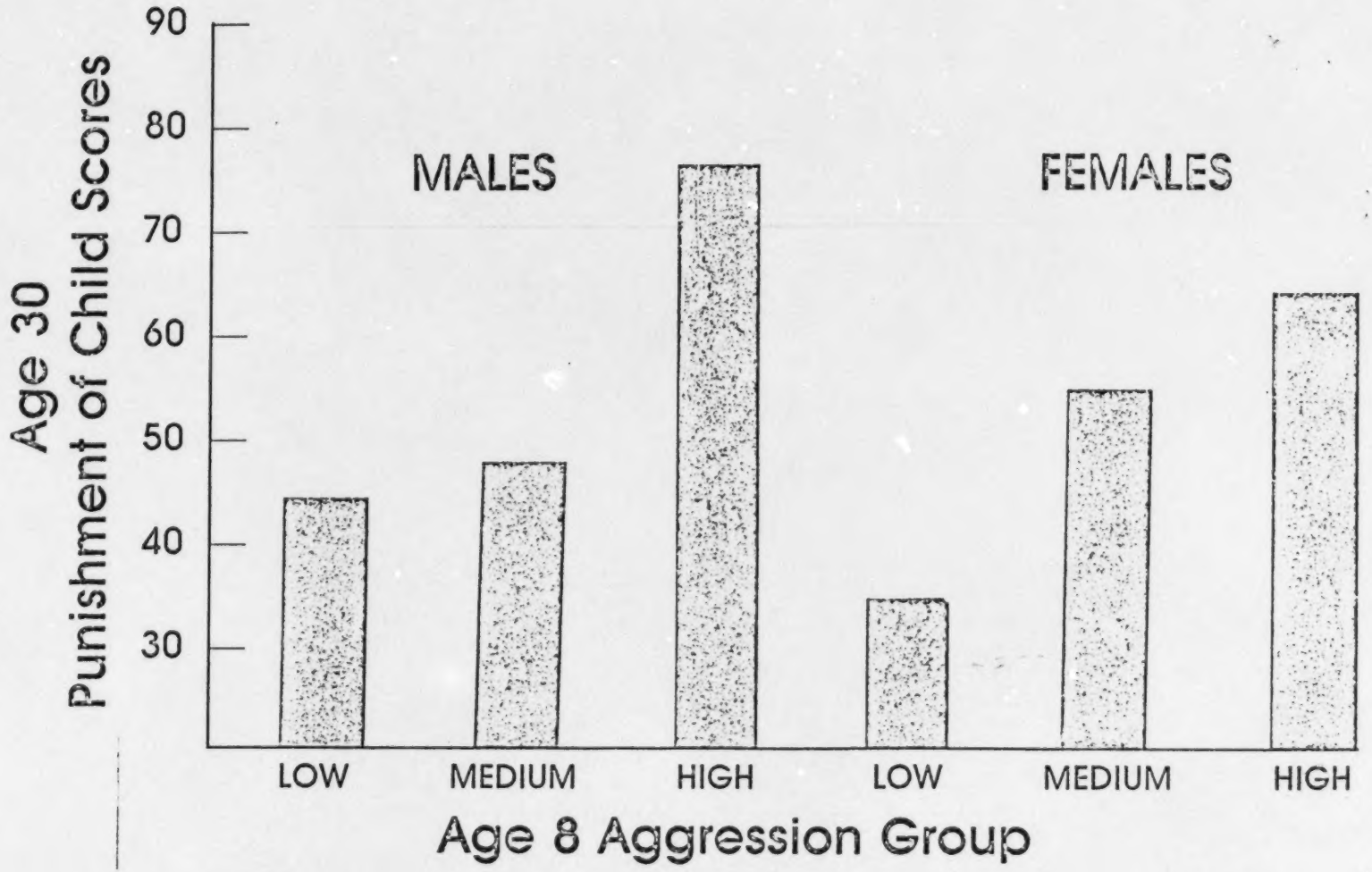
Correlations of Skew-Corrected Measures of Aggression Across Generations

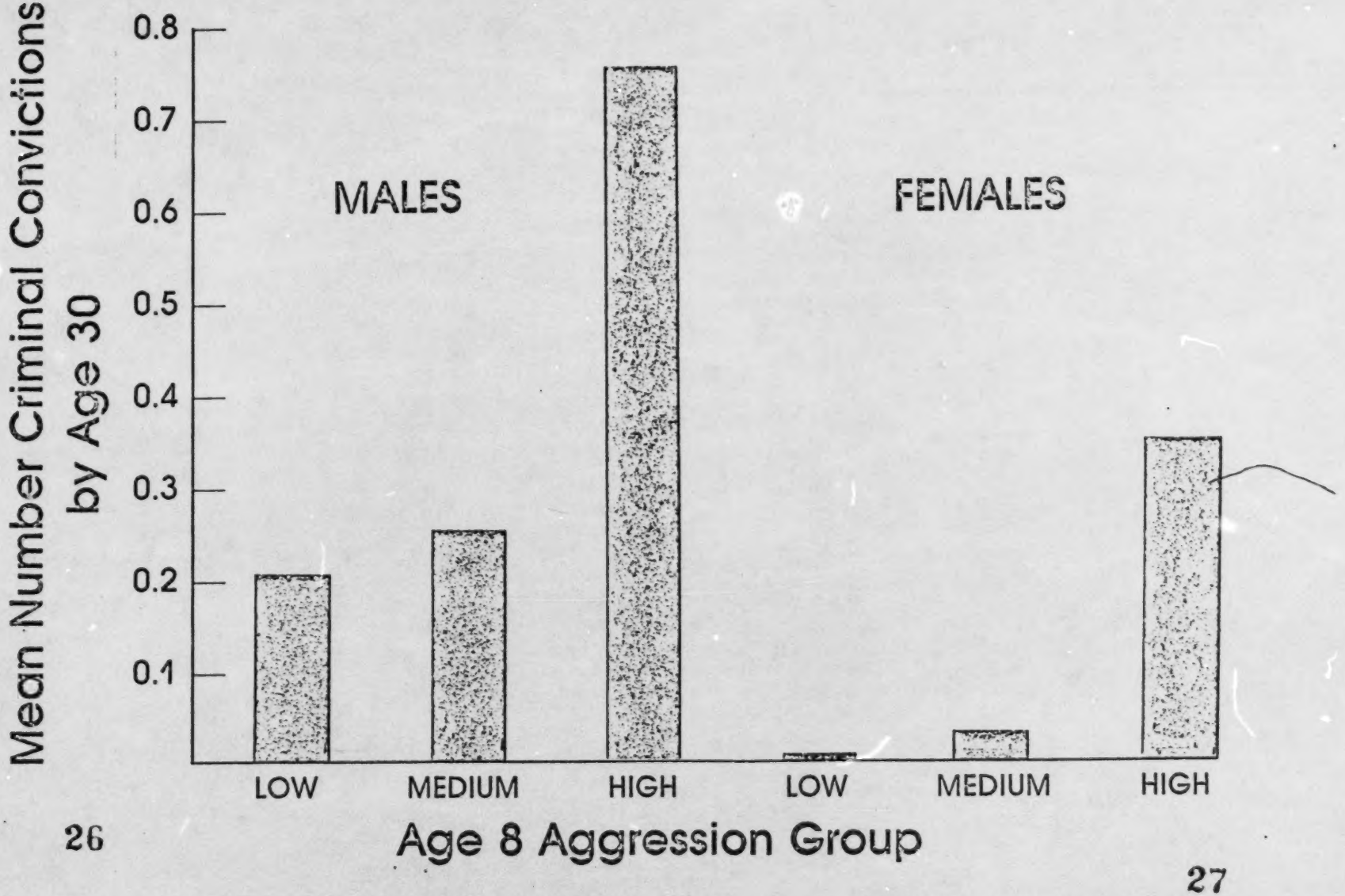
	Parent's Aggression	Subject's Aggression				
	(When Subject Age 8)	Age 8	Age 19		Age 30	
	Punishment of Subject at Age 8	Peer-nominated	Peer-nominated	MMPI F+4+9	MMPI F+4+9	Punish of Child
Parents' Aggression (When subject age 8)						
Punishment of Subject	1.00	.25***	---	.13*	.14**	.25**
Child's Aggression (When Subject Age 30)						
Self-rating	---	.31**	---	---	.26*	.31**
Aggressive Fantasy	.17	.40***	.13	---	.27**	.34**

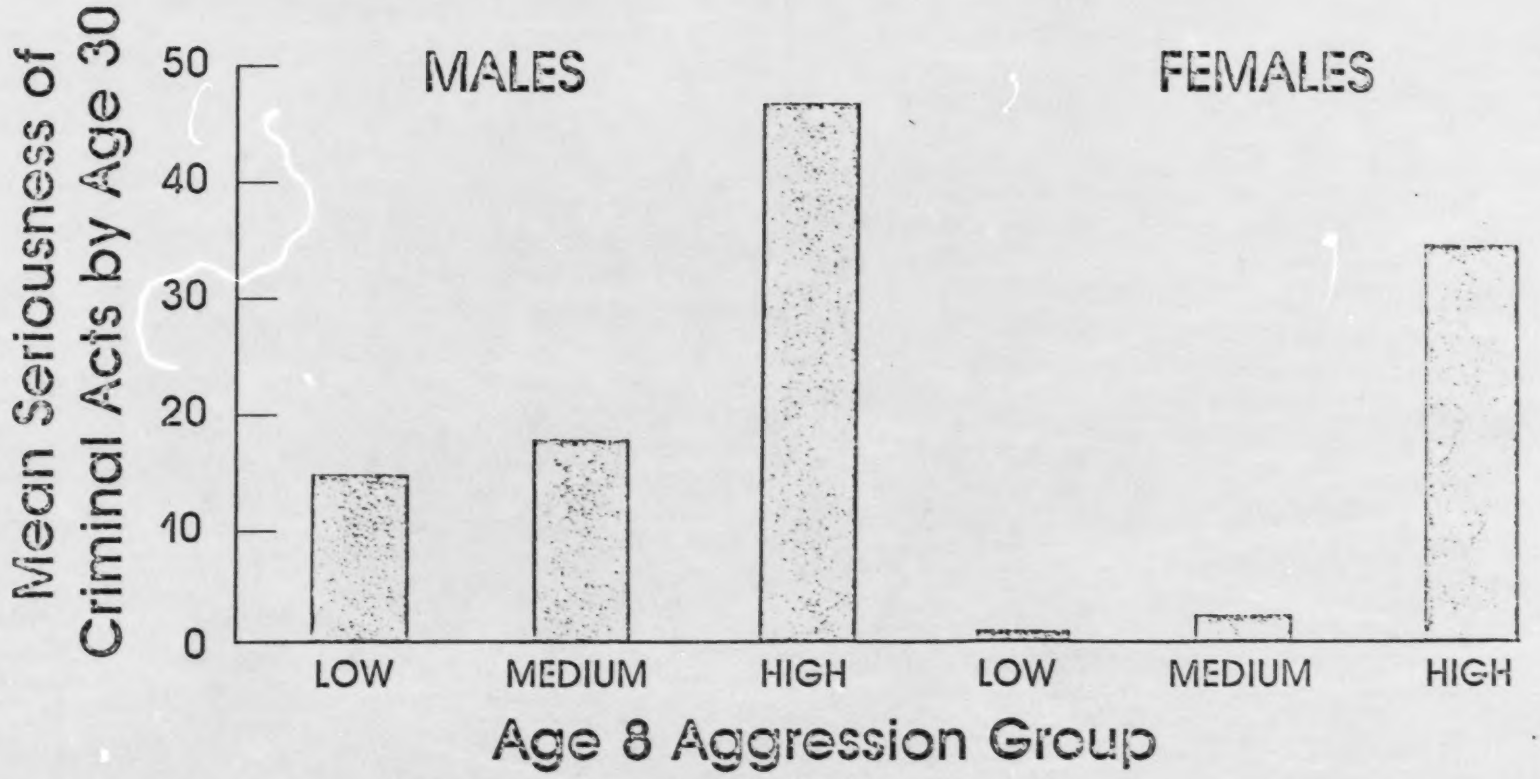
A logit transformation was used with the peer-nominations which are proportions and a log transforms with the subject's self-ratings.

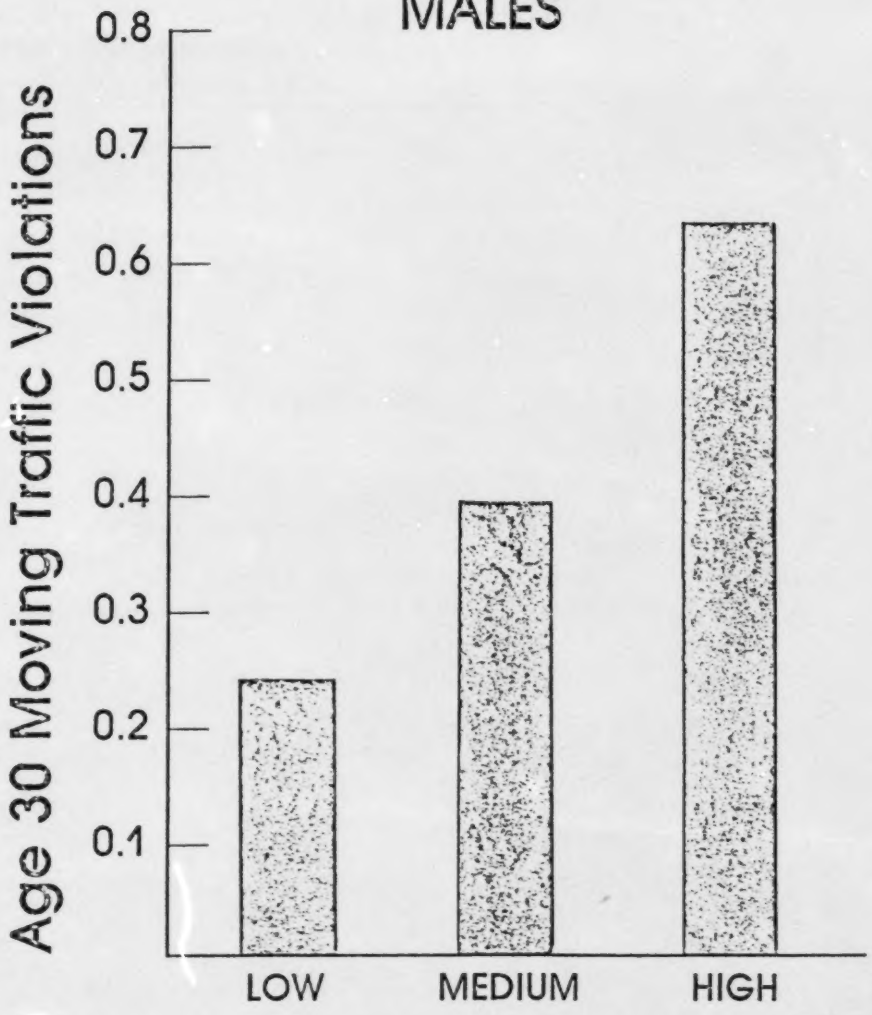
+p<.10 *p<.05 **p<.01 ***p<.001


Age 30 MMPI F+4+9
Aggression Score
190
180
170
160
150
MALES
FEMALES
LOW
MEDIUM
HIGH
LOW
MEDIUM
HIGH
Age 8 Aggression Group

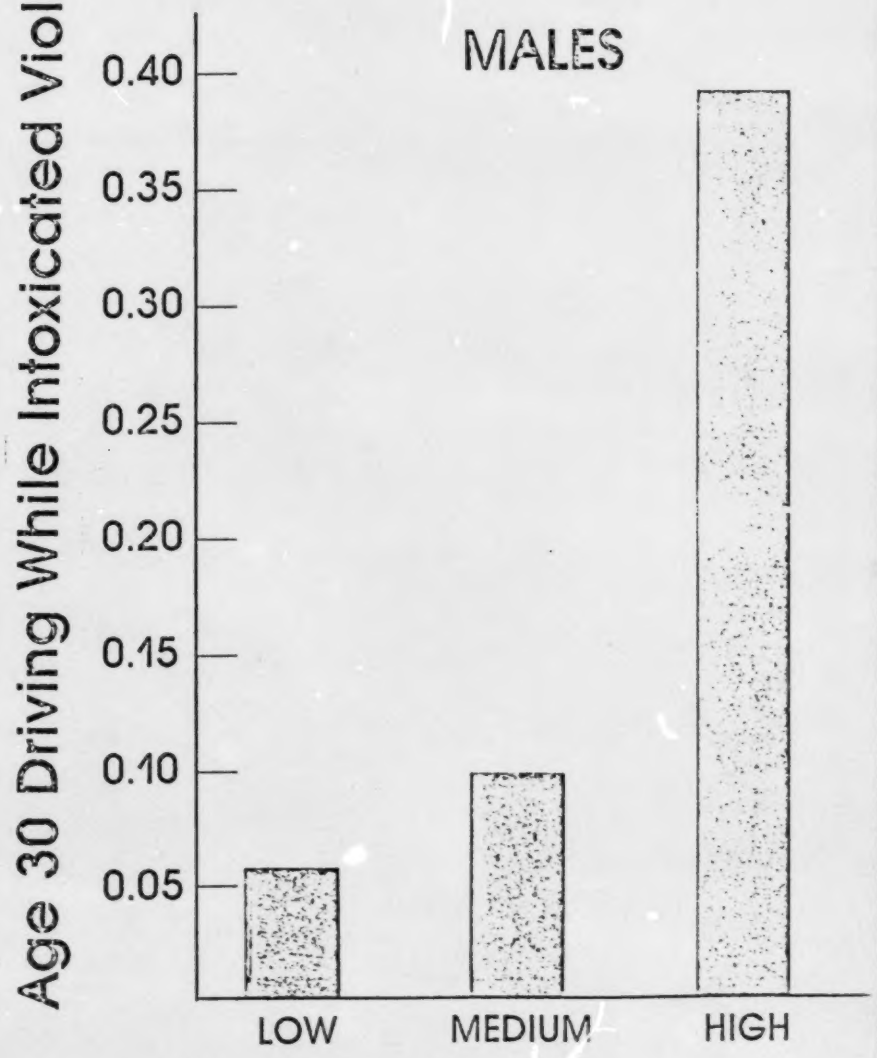

Age 30
Punishment of Child Scores
90
80
70
60
50
40
30
MALES
FEMALES
LOW
MEDIUM
HIGH
LOW
MEDIUM
HIGH
Age 8 Aggression Group


Mean Number Criminal Convictions by Age 30
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
MALES
FEMALES
LOW
MEDIUM
HIGH
LOW
MEDIUM
HIGH
Age 8 Aggression Group


Mean Seriousness of Criminal Acts by Age 30
50
40
30
20
10
0
MALES
FEMALES
LOW
MEDIUM
HIGH
LOW
MEDIUM
HIGH
Age 8 Aggression Group



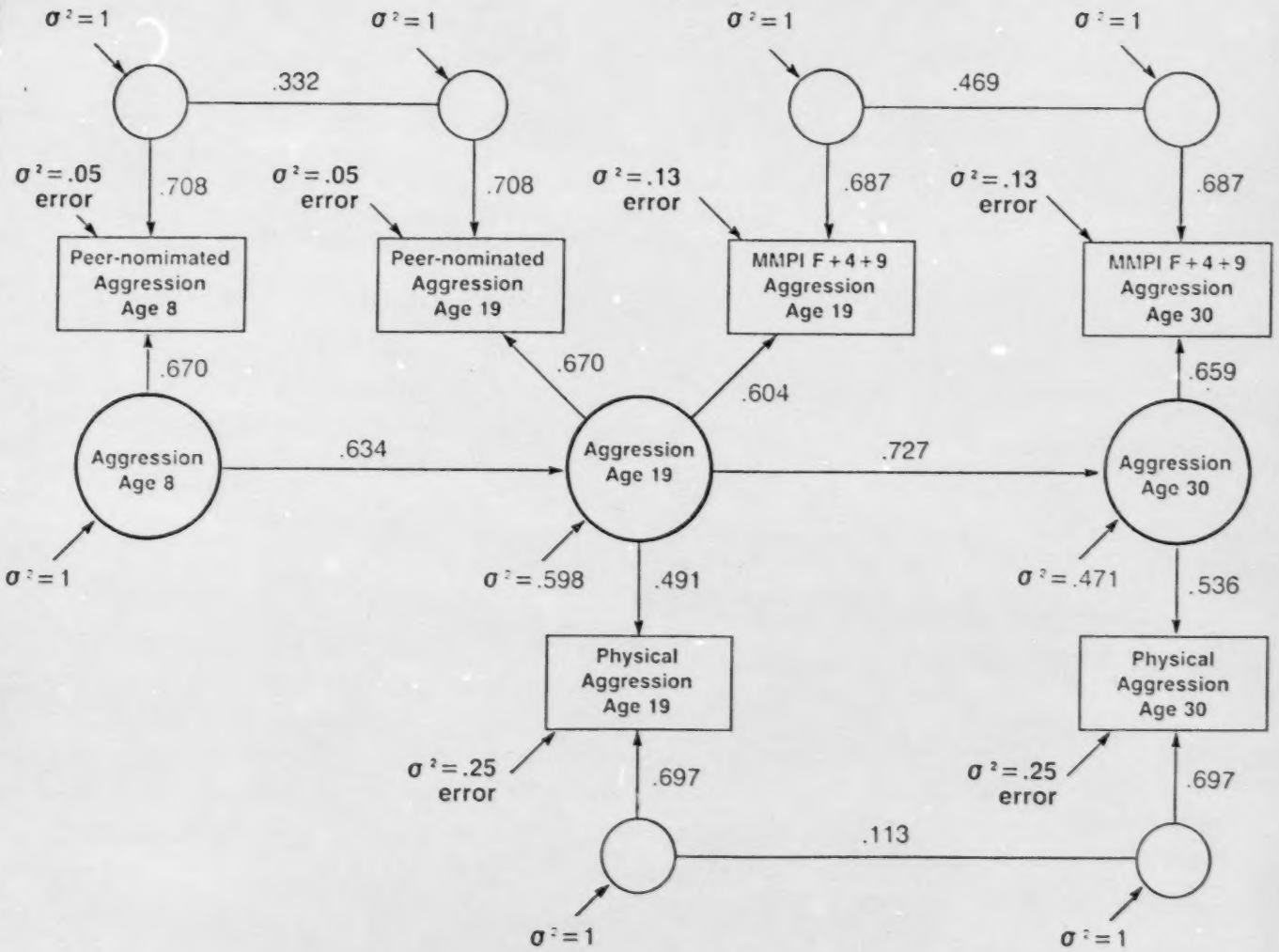
30

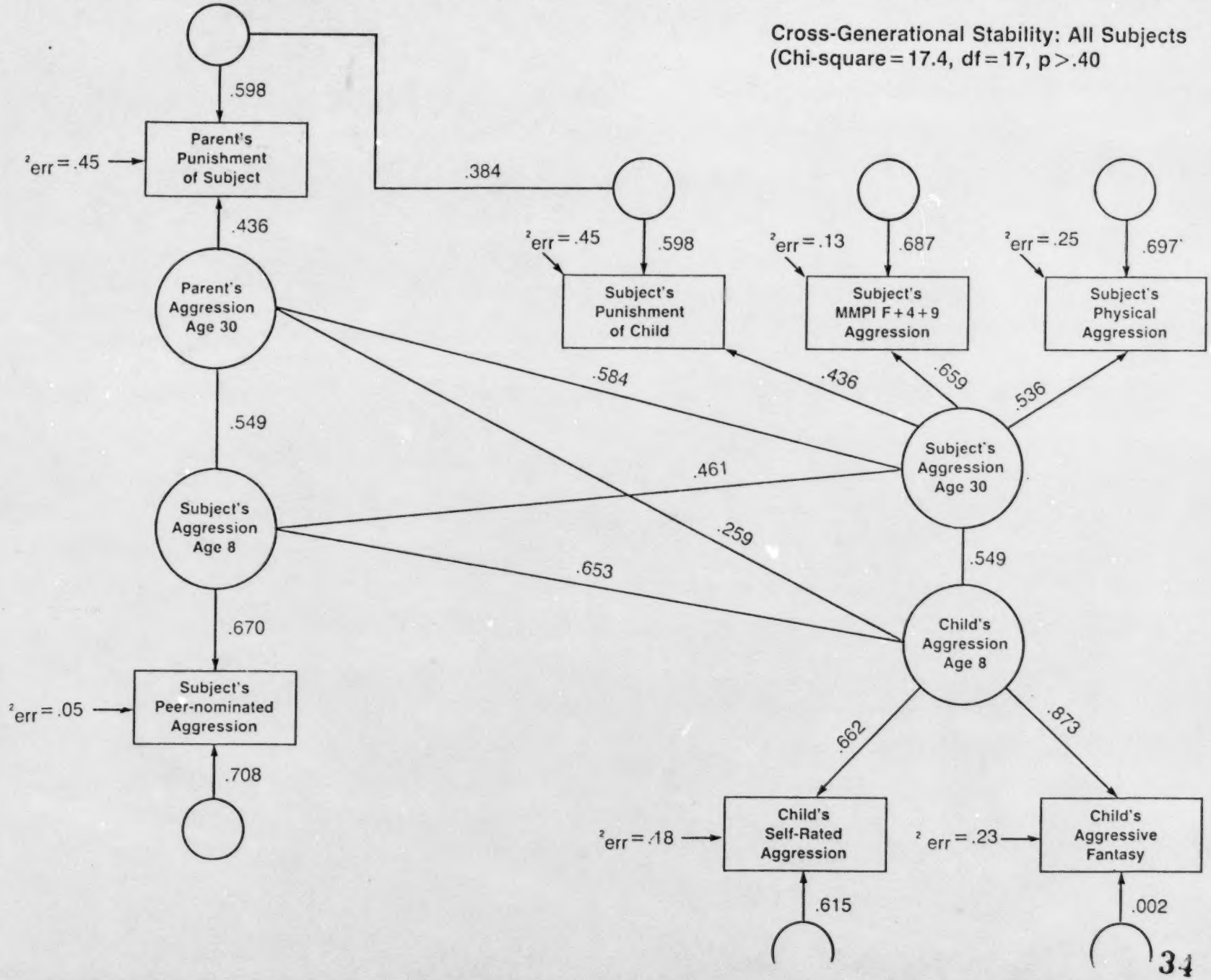


31

Age 8 Aggression Group

ALL SUBJECTS: Stability (Agg 8 → Agg 30) = .461
Chi-square = 2.67, df = 8, p = .95




Cross-Generational Stability: All Subjects
(Chi-square = 17.4, df = 17, p > .40
.598
Parent's Punishment of Subject
^{2}err = .45
.384
.436
Parent's Aggression Age 30
^{2}err = .45
.598
Subject's Punishment of Child
^{2}err = .13
.687
Subject's MMPI F + 4 + 9 Aggression
^{2}err = .25
.697
Subject's Physical Aggression
.584
.436
.659
.536
.549
.461
Subject's Aggression Age 30
Subject's Aggression Age 8
.259
.653
.549
.670
Child's Aggression Age 8
^{2}err = .05
Subject's Peer-nominated Aggression
.708
.662
.873
^{2}err = .18
Child's Self-Rated Aggression
^{2}err = .23
Child's Aggressive Fantasy
.615
.002